

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 1806 :  
In re application of :  
HITOSHI NAGAOKA : INHIBITOR OF HEPATITIS B  
Serial No. 08/257,355 : AND HIV ACTIVITY  
Filed June 9, 1994 :

Pittsburgh, Pennsylvania  
September 9, 1994

INFORMATION DISCLOSURE STATEMENT

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §§1.97-1.98, Applicant hereby submits this Information Disclosure Statement which includes a completed Form PTO-1449 and one (1) copy of each prior art reference listed thereon. In addition, English abstracts of the Japanese Patent Nos. 60-23826/1985; 4-35149/1992; and 4-6171/1992 are enclosed.

The references identified in Form PTO-1449 are referred to on pages 2, 3 and 10 of the specification and are relevant for the reasons stated therein. Applicant cited pp. 317-331 of the "Antiviral Research" reference in the specification. However, Applicant is enclosing only pages 317, 321 and 322 of this

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents and Trademarks, Washington, D.C. 20231 on September 9, 1994.

Barbara E. Johnson, Registration No. 31,198  
(Name of Registered Representative)

Signature

09/09/94  
Date

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reference in this Information Disclosure Statement. Page 317 is the first page of the reference and pages 321 and 322 contain the only passages of relevance.

Pursuant to 37 C.F.R. §1.97(b)(1), no fee is believed to be due for the submission of this Information Disclosure Statement as it is being submitted within three months of the filing date of the patent application. Nevertheless, the Commissioner of Patents and Trademarks is hereby authorized to charge any additional fees which may be required to Deposit Account No. 23-650 or refund any overpayment in the form of a check. One original and two copies of this Information Disclosure Statement are enclosed.

Examination and allowance of claims 1-4 and 8-10 are respectfully submitted.

Respectfully submitted,

WEBB ZIESENHEIM BRUENING LOGSDON  
ORKIN & HANSON, P.C.

By 

Barbara E. Johnson  
Registration No. 31,198  
Attorney for Applicant  
700 Koppers Building  
436 Seventh Avenue  
Pittsburgh, PA 15219-1818  
Telephone: (412) 471-8815  
Facsimile: (412) 471-4094

|   |                                 |                          |
|---|---------------------------------|--------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE<br><br>INFORMATION DISCLOSURE<br>STATEMENT BY APPLICANT<br><br>(Use several sheets if necessary) | ATTY. DOCKET NO.<br>1217/940247 | SERIAL NO.<br>08/257,355 |
|   | APPLICANT<br>Hitoshi NAGAOKA    |                          |
|   | FILING DATE<br>June 9, 1994     | GROUP<br>Art Unit 1806   |

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|---------------------|----|-----------------|------|------|-------|----------|-------------------------------|
|                     | AA |                 |      |      |       |          |                               |
|                     | AB |                 |      |      |       |          |                               |
|                     | AC |                 |      |      |       |          |                               |
|                     | AD |                 |      |      |       |          |                               |
|                     | AE |                 |      |      |       |          |                               |
|                     | AF |                 |      |      |       |          |                               |
|                     | AG |                 |      |      |       |          |                               |
|                     | AH |                 |      |      |       |          |                               |
|                     | AI |                 |      |      |       |          |                               |
|                     | AJ |                 |      |      |       |          |                               |
|                     | AK |                 |      |      |       |          |                               |

## FOREIGN PATENT DOCUMENTS

|  |    | DOCUMENT NUMBER |   |   |   |   |   |   | DATE     | COUNTRY | CLASS   | SUBCLASS | TRANSLATION |    |
|--|----|-----------------|---|---|---|---|---|---|----------|---------|---------|----------|-------------|----|
|  |    |                 |   |   |   |   |   |   |          |         |         |          | YES         | NO |
|  | AL | 6               | 0 | 2 | 3 | 8 | 2 | 6 | 06/10/85 | Japan   | A23 L 2 | 38       | X           |    |
|  | AM |                 |   | 4 | 6 | 1 | 7 | 1 | 02/05/92 | Japan   | A61 K35 | 84       | X           |    |
|  | AN |                 |   | 4 | 3 | 5 | 1 | 4 | 06/10/92 | Japan   | A23 L 2 | 38       | X           |    |
|  | AO |                 |   |   |   |   |   |   |          |         |         |          |             |    |
|  | AP |                 |   |   |   |   |   |   |          |         |         |          |             |    |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|  |    |   |
|--|----|---|
|  | AQ | Tetsuo Taguchi et al., BIOTHERAPY, Vol. 2, No. 3 (1988) pp. 509-521   |
|  | AR | Harumi Suzuki et al., Inhibition of the Infectivity and Cytopathic Effect of Human ..., BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, Vol. 160, No. 1 (1989) pp. 367-373 |
|  | AS | Harumi Suzuki et al., Structural Characterization of the Immunoactive and Antiviral ..., Agric. Biol. Chem., Vol. 54, No. 2 (1990) pp. 479-487                                  |

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DATE CONSIDERED

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|                     | AE |                 |      |      |       |          |                               |
|                     | AF |                 |      |      |       |          |                               |
|                     | AG |                 |      |      |       |          |                               |
|                     | AH |                 |      |      |       |          |                               |
|                     | AI |                 |      |      |       |          |                               |
|                     | AJ |                 |      |      |       |          |                               |
|                     | AK |                 |      |      |       |          |                               |

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|--|----|-----------------|------|---------|-------|----------|-------------|----|
|  |    |                 |      |         |       |          | YES         | NO |
|  | AL |                 |      |         |       |          |             |    |
|  | AM |                 |      |         |       |          |             |    |
|  | AN |                 |      |         |       |          |             |    |
|  | AO |                 |      |         |       |          |             |    |
|  | AP |                 |      |         |       |          |             |    |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|    |  |
|----|--|
| AQ | Yoshio Inouye et al., <i>In Vitro Antiviral Activity of Polyoxomolybdates</i> ..., |
|    | Antiviral Research, Vol. 20 (1993) pp. 317, 321-322                                |
| AR |  |
| AS |  |

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